STRAMENTOV, Andrey Yevgen'yevich; SOSYANTS, Vasiliy Georgiyevich;
FISHEL'SON, Mikhail Semenovich; YUDIN, V.A., red.; ZAMYSHLYAYEVA,
I.M., red.izd-va; LELYUKHIN, A.A., tekhn.red.

[City transportation and traffic engineering] Gorodskoi transport
i organizatsiia dvizheniia. Moskva, Izd-vo M-va kommun.khos.RSFSR,
1960. 351 p.
(MIRA 13:8)
(Traffic engineering)   (Local transit)

STRAMENTOV, A.Ye., prof., doktor tekhn.nauk

Problems in modern urban development. Gor.khoz.Mosk. 34 no.3:
1-3 Mr '60. (MIRA 13:8)

1. Chlen-korrespondent Akademii stroitel'stva i arkhitektury SSSR.
(City planning) (Traffic engineering)

STRAMENTOV, A.Ye., prof., doktor tekhn. nauk; CHEREPANOV, V.A.,
dotsent, kand. tekhn. nauk

Organization of urban traffic. Gor. khoz. Mosk. 35 no.10:
40-44 O '61. (MIRA 16:7)

(City traffic—Congresses)

STRAMENTOV, A.Ye.

Some problems in the rebuilding of Moscow. Gor.khoz.Mosk. 35
no.4:10-12 Ap '61.   (MIRA 14:5)

1. Chlen-korrespondent Akademii stroitel'stva i arkhitektury SSSR.
                    (Moscow—City planning)

STRAMENTOV, Andrey Yevgen'yevich, prof., doktor tekhn. nauk;
BUTYAGIN, Veniamin Aleksandrovich, dots., kand. tekhn. nauk;
FISHEL'SON, M.S., red.; BOLOTINA, A.V., red. izd-va; KHENOKH,
F.M., tekhn. red.

[Planning and improvement of cities]Planirovka i blago-
ustroistvo gorodov. Izd.2., perer. i dop. Moskva, Izd-vo M-va
kommun.khoz.RSFSR, 1962. 507 p. (MIRA 16:3)

1. Chlen-korrespondent Akademii stroitel'stva i arkhitektury
SSSR (for Stramentov).
(City planning)

STRAMENTOV, A.Ye.

Problems of traffic movement in present-day city planning. Izv.
ASiA no.3:37-42 '62. (MIRA 15:11)

1. Chlen-korrespondent Akademii stroitel'stva i arkhitektury SSSR.
(City traffic)

SHIRAMETOV, Andrey Yevgen'yevich, doktor tekhn. nauk, prof.;
FISHEL'SON, Mikhail Samuilovich, kand. tekhn. nauk, dots.;
NADEZHIN, A.M., red.; GOLOVKINA, A.A., tekhn. red.

[City traffic; problems of speed and safety] Gorodskoe dvi-
zhenie; voprosy skorosti i bezopasnosti. Moskva, Gosstroi-
izdat, 1963. 293 p.   (MIRA 16:12)
        (City traffic)   (Traffic engineering)

STRAKHOV, Andrey Yevgen'yevich[deceased]; [others...]
Afanas'yevich; ZAMAKHAYEV, M.S., prof., [...]
[deceased]

[City streets and roads] Gorodskie ulitsy i dorogi.
Moskva, Stroiizdat, 196-. 343 p. (MIRA 1?:o)

SOV/137-58-10-20723

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 10, p 55 (USSR)

AUTHOR: Gebler, I.V., Stramkovskaya, K.K.

TITLE: Lignite Absorption of Heavy Metals from Dilute Solutions of
             Their Salts (O pogloshchenii burym uglem tyazhelykh metallov
             iz razbavlennykh rastvorov ikh soley)

PERIODICAL: Izv. vost. fil. AN SSSR, 1957, Nr 12, pp 78-82

ABSTRACT: An investigation is made of the possibility of using lignite to
             absorb Cu, Ag, and Au from dilute aqueous solutions by cation-
             ization and sorption of their ions. It is found that Cu is well
             absorbed from solutions of $CuSO_4$ and the complex salt
             $[Cu \cdot (NH_3)_4]'' SO_4''$, Ag from $AgNO_3$ solution and the complex
             salt $[Ag \cdot (NH_3)_2]' Cl'$, and Au from AuCl solution. Au and Ag
             are absorbed if they are cations. The metal may be removed
             from the coal by treatment thereof with weak solutions of the
             appropriate acids or by burning it. It is found possible to
             recover Au in this fashion from a number of mineral sources,
             and also to increase the recovery of Au in Pb concentrate by
             addition of coal to pulp in the flotation of polymetallic ores
Card 1/1   L P

AUTHOR: Stramkovskaya, K. K.   SOV/65-58-9-13/16

TITLE: Investigations on the Carbonisation of Humic Acids.
             (Issledovaniye obuglerozhivaniya guminovykh kislot)

PERIODICAL: Khimiya i Tekhnologiya Topliv i Masel, 1958, Nr 9,
             pp 67 - 69, (USSR)

ABSTRACT: Conditions of separation of water and CO_2 from humic
             acids were evaluated. The authors described the effect
             of various factors on the decarboxylation and dehydra-
             tion processes of humic acids and their salts: tempera-
             tures (170^0- 300^0C), pressure (9 - 89 atms) and time of
             heating (from 5 - 150 hours). Dehydrated humic acids,
             humic acids in the form of an aqueous gel and soluble
             and insoluble salts of humic acids from Tagans turf of
             the Tomsk region were tested. Results of these experi-
             ments are given in the form of a graph and in a table.
             It can be seen that when dehydrated humic acids are
             maintained at a temperature of 170^0 - 300^0 in water
             vapour under pressure - or in the absence of pressure -
             dehydrogenation sets in. When the humic acids and their
             salts are heated at 170^0 - 300^0C at pressures corres-
             ponding to these temperatures decarboxylation takes
Card 1/2   place. The separation of CO_2 and H_2O from humic acids

SOV/68-59-0-13/15

Investigations on the Carbonisation of Humic Acids.

during metamorphosis of the coal is obviously possible also without the aid of micro-organisms. The physical condition of humic acids and the water supply influence considerably the further course of the reaction. T h e d r y humic acids are subjected to dehydration during metamorphosis. One of the most important factors during metamorphosis is the temperature which influences the carbonisation of humic acids. There is 1 Table, 1 Figure and 7 References: 6 Soviet and 1 German.

ASSOCIATION: Politekhnicheskiy Inst im. S. M. Kirova (The Polytechnical Institute im. S. M. Kirov)

1. Humic acids--Carbonization   2. Humic acids--Dehydration
3. Humic acids--Temperature factors   4. Humic acids--Properties
5. Coal--Chemical properties

Card 2/2

GRINEVICH, Yu. K.

Tendency of humic acids to cake. Izv.SO.akad.nauk S.SR no.4
38:45-49 '60. (MIRA 12:10)

1. Tomskiy politekhnicheskiy institut im. S.M.Kirova.
(Humic acids)

SHAPOVSKAYA, K.K.; BOGDIN, V.K.; DILL'T, V.N.

Reactivity of peat coke and the effect of the additions of ore and fluxes. Izv.THI 11.:15-100 '61.   (MIRA 14:9)

1. Predstavleno professorom doktorom I.V. Gebleром.
   (Peat gasification) (Ores) (Fuel)

... ..., ...; ...., ...

Study of on of the Rozhnestvenka deposits of ... ak province b.
...... on ... ... Izv....I Il ...0-... '61.(... ...

1. Ir ... . doktorok I.V.......
... ...-(... ....) ....)
....

STRAMKOVSKAIA, V.K., IVANOVA, V.D.

Effect of iron ore and furnace flux additions on the yield of products
of peat semicoking. Izv. TPI 126:12-14 '64. (MIRA 18:7)

SMOL'YANINOV, S I.; STRAMKOVSKAYA, K.K.; SMIRNOV, A.P.; OLITSKIY, I.F.;
KVASHNIN, S.A.

Removal of dust and tar from gases by electrostatic precipitation.
Izv. TPI 126:91-97 '64.   (MIRA 18:7)

OVLASYUK, V.Ya., kand. tekhn. nauk; STRAMNOV, Yu.S., inzh.;
SUKHOPRUDSKIY, N.D., kand. tekhn. nauk

Use of the TE-62 system for the remote control of electric
locomotives. Trudy TSNII MPS no.276:47-63 '64.

(MIRA 17:8)

STRAMOUS, M.I. FILIPOV, V.V., inzhener, redaktor.

[Repair of machines in railroad construction] Remont mashin na
zheleznodorozhnom stroitel'stve. Moskva, Gos. transp. zhel-dor.
izd-vo, 1953. 270 p.   (MLRA 7:4)
                    (Railroads--Maintenance and repair)

STRAMOUS, M F

STRAMOUS, M.F., inzhener.

New equipment for building the subgrade of railways. Mekh. trud.
rab. 7 no.11:40-42 D '53.   (MLRA 6:12)
                              (Excavating machinery) (Railroads--Earthwork)

STRAMOUS, M.F.; KATTSEN, I.Ye., inzhener, redaktor; UDOD, V.Yn., redaktor; SMOL'YaKOVA, M.V., tekhnicheskiy redaktor.

[The building site equipment repair man] Slesar' po remontu mashin na stroitel'noi ploshchadke. Moskva, Gos. izd-vo lit-ry po stroitel'stvu i arkhitekture, 1954. 67 p. (MLRA 7:12) (Building machinery--Maintenance and repair)

STRAMOUS, M.F., inzhener;KATTSEN, I., inzhener, redaktor; UDOD, V.Ya., redaktor; TOKER, A.M., tekhnicheskiy redaktor

[Progressive work practices on a grader-elevator] Peredovoi opyt raboty na greider-elevatore. Moskva, Gos. izd-vo lit-ry po stroit. i arkhitekture, 1955. 23 p.   (MIRA 8:7)
          (Excavating machinery)

STRAMOUS, M.F.

Equipment for finishing work on earthen road beds. Avt.dor. 18
no.2:22-23 Mr-Ap '55.   (MLRA 8:6)
    (Road machinery)

STRAMOUS, Mikhail Fedorovich; KATTSEN, I.Ye., inzhener, redaktor; MALYSHEV,
M.M., redaktor izdatel'stva; GUSEVA, S.S., tekhnicheskiy redaktor

[Work practice of excavator operator M.P.Usachev] Opyt raboty
ekskovatorshchika N.P.Usacheva. Moskva, Gos. izd-vo lit-ry po stroit.
i arkhitekture, 1956. 22 p.   (MIRA 9:10)
        (Excavating machinery)

STRAMOUS, Mikhail Fedorovich; RARSUNOV, I.P., inzhener, redaktor; KANDYKIN,
A.Ye., tekhnicheskiy redaktor

[Experience in operating ditch diggers] Ouyt raboty na kiuvetokopatele.
Moskva, Gos. transp. zhel-dor. izd-vo, 1956. 33 p.   (MLRA 10:4)
                    (Earthmoving machinery)

STRAMOUS, M.F., inzhener.

Experience with operating an excavator. Mekh.stroi. 13 no.2:
24-26 F '56.   (MLRA 9:5)
              (Excavating machinery)

STRAMOUS, M.F., cand.tekhn.nauk; KATTSEN,I.Ye., inzh., nauchnyy red.;
GUROV, Yu.S., red.izdatel'stva; STEPANOVA, E.S., tekhn.red.

[Practices of repairing excavating and transport machinery]
Opyt remonta zemleroinykh i transportnykh mashin. Moskva,
Gos.izd-vo lit-ry po stroit.i arkhit., 1957. 135 p. (MIRA 11:1)
                    (Excavating machinery--Maintenance and repair)
                    (Motortrucks--Maintenance and repair)
                    (Tractors--Maintenance and repair)

SOV/118-t.-2-8/11

AUTHOR: Stramous, M.F., Candidate of Technical Sciences

TITLE: New Machines for Transport Construction (Novyye mashiny
             dlya transportnogo stroitel'stva)

PERIODICAL: Mekhanizatsiya i avtomatizatsiya proizvodstva, 1959,
             Nr 3, pp 14-17 (USSR)

ABSTRACT: For the construction of railroads, thousands of excav-
             ators are used. The earth, worked by them, amounts to
             hundreds of millions of m^3. The TsNIIS has constructed
             a new type of excavator, leading to a considerable pro-
             duction increase. For the construction of dams, hydro-
             mechanization is widely applied. The earth-working
             machine 1: NZBA with automatic steering drive, increases
             production and decreases construction costs. For work
             on rocky ground, drilling machines BTS-2 mounted on
             tractor S-80 are employed. The manual work of small
             ditch construction and the grading of slopes will be
             replaced by excavator ETU-353, with special equipment
Card 1/2   for ditch digging. For final clearing away of earth, a

New Machines for Transport Construction   SOV/118-59-2-8/22

"profiler" is used. The worm-drive grader, mounted on
the base of excavator ETU-252 is of great importance.
For removing unnecessary earth, automatic unloading
platforms with 2 containers were manufactured. The Ug-
lich plant produces, for ballast work electrobalast
machines. For small-scale tasks, regulators combined
with tractors and sloping elevators for lifting railroad
ties are being constructed. New special machines for
laying railroad ties are also being produced. There are
4 photographs and 1 graph.

Card 2/2

STRAMOUS, Mikhail Fedorovich; KATTSEN, I.Ye., inzh., red.; SERGEYEVA,
A.I., red.; BOBROVA, Ye.N., tekhn,red.

[Maintenance and repair of machinery in railroad construction]
Remont mashin na zheleznodorozhnom stroitel'stve. Izd.2. Moskva,
Vses.izdatel'sko-poligr.ob"edinenie M-va putei soobshcheniia,
1960. 323 p.   (MIRA 14:1)
        (Railroads--Maintenance and repair)
        (Railroads--Equipment and supplies)

... , ... , ...tekhn.nauk;   ... , ..., k: d.tekhn.nauk,
... . , ... , k: d.tekhn.nauk.

... -1,5 ... ... rease in ro,aring o c ... tors.
... ... 18 nc. 1:... -% ... '61.   (: I.. 1/:2)

1. ... c-...truktoraben ... ure ... br rastrom.
(... ting ... :... ... ... co and ro,(ir)

TERNOVSKIY, V.A., kand.tekhn.nauk; STRAMOUS. M.F., kand.tekhn.nauk

"Track machinery and mechanisms" by N.N.Gulenko, V.E.Gora.
Reviewed by V.A.Ternovskii, M.F.Stramous. Put' i put.khoz. 6
no.3:46 Mr '62.   (MIRA 15:3)
          (Railroads—Equipment and supplies)
          (Gulenko, N.N.) (Gora, V.E.)

PHASE I BOOK EXPLOITATION   SOV/6245

Stramous, M. F., Candidate of Technical Sciences

Vybor plasticheskikh mass dlya podshipnikov skol'zheniya stroitel'-
    nykh mashin (Selecting Plastic Materials for Slide Bearings
    of Building Machinery). Moscow, Mashgiz, 1962. 97 p.   3500
    copies printed.

Reviewer: V. N. Lymzin, Candidate of Technical Sciences; Ed.: Ye. A.
    Velichkin, Engineer; Ed. of Publishing House: P. V. Otdel'nov;
    Tech. Ed.: N. F. Demkina; Managing Ed. for Literature on Heat
    Energy, Metallurgy, Highway Construction and Hoisting and Trans-
    porting Machinery Construction: N. M. Zyuzin. .

PURPOSE: This book is intended for technical personnel engaged in
    the manufacture, repair, or operation of construction, road-
    building, and other types of machinery which work in abrasive
    media.

COVERAGE: The book contains the results of laboratory and opera-
    tional investigations of the wearability of plastic sliding

Card 1/1 2

STRAM ILS, M.F., kand.tekhn.nauk

Machine for molding polyamide articles. Biul.tekh.-ekon.inform.
Gos.nauch.-issl.inst.nauch.i tekh.inform. no.3:25-27 '63.
(MIRA 16:10)

STRAMKUS, M.F., kand. tekhn. nauk

Using bearings made of polycaprolactam in construction machinery.
Trans. stroi. 13 no.12:55-57 D'63   (MIRA 17:7)

STRAM-US, M.F., kand.tekhn.nauk

Machine for abrasive-wear testing of sliding bearings. Biul.
tekh.-ekon.inform.Gos.nauch.-issl.inst.nauch. i tekh.inform.
16 no.10:52-54 '63.   (MIRA 16:11)

ST.AMOUS, M.F., kand. tekhn. nauk

Economic effectiveness of using polycaprolactam bearings during
the repair of excavators. Stroi. i dor. mash. 9 no.5:20-22 My '64.
(MIRA 17:6)

STRAMOUS, M.F., kand. tekhn. nauk

Wear resistance of plastic bearings of construction and road machinery. Stroi. i dor. mash. 8 no.3:27-31 Mr '63.

(MIRA 18:5)

STRAMOUS, M.F., kand. tekhn. nauk

Advantages of using plastic bearings in the repair of machinery.
Transp. stroi. 14 no.5:30 My '64.   (MIRA 18:11)

L 10214-66

AUTHORS: Stramous, M. F.; Savotin, G. I.; Porokhnya, G. A.; Perelyayev, Yu. N.; Lysov, N. I.

ORG: none

TITLE: A machine for building levees along alluvial plains and for forming land slopes. Class 84, No. 175897 /announced by Design and Construction Bureau of Glavstroymekhanizatsiya of the State Production Committee on the Transport Construction SSSR (Proyektno-konstruktorskoye byuro glavstroymekhnizatsii gosudarstvennogo proizvodstvennogo komiteta po transportnomu stroitel'stvu SSSR)7

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 20, 1965, 152

TOPIC TAGS: excavating machinery, construction machinery

ABSTRACT: This Author Certificate presents a machine for building levees on alluvial plains and for forming land slopes. The machine contains a working member with numerous buckets for transverse excavations (see Fig. 1). This member is supported by a bearing-turning platform. To assure the possibility of levee building and slope forming, as well as trench excavating, the working member is placed on the turning platform eccentrically in respect to its axis of rotation. The rear part of the machine contains a transverse carrier and a demountable stopping baffle fixed to the frame of the working member. The body of each bucket may be open at the bottom, while

UDC: 621.879.443.6
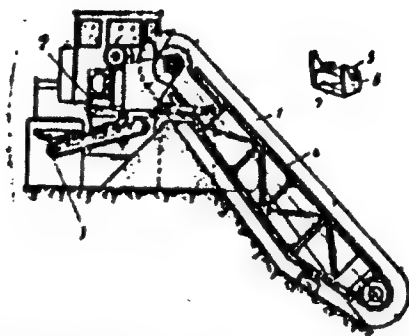
Card 1/2

ACC NR: AP5028542

Fig. 1. 1 - Working member with numerous buckets, for transverse excavation; 2 - supporting-turning platform; 3 - carrier; 4 - frame of the working member; 5 - bucket; 6 - open body; 7 - blade.

a blade is fixed in its foremost part. Orig. art. has: 1 figure.

SUB CODE: 13/ SUBM DATE: 02Mar64

Card 2/2

L 24543-66   EWT(d)/EWP(1)   IJP(c)   BO
ACC NR: AP6006326
SOURCE CODE: UR/0413/66/000/002/0048/0048

AUTHORS: Ovlasyuk, V. Ya.; Sukhoprudskiy, N. D.; Strasnov, Yu. S.; Trifonov, I. I.

ORG: none

TITLE: A frequency system of remote control. Class 21, No. 177954

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 2, 1966, 48

TOPIC TAGS: remote control, frequency control, system reliability

ABSTRACT: This Author Certificate presents a frequency system of remote control for distributed objects. The system includes frequency selectors of the group, of the character of operation, and of the number of the object. The system also includes frequency shapers of the object of the remote signal system. The design increases the reliability of the operation. The group selector is connected to the input of the power supply bus bars of the character of operation selectors. The number of the object selector and the character of operation selector are connected to the input of the power supply bus bars of the output relays. The power supply bus bars of the receivers of the character of operation selectors are connected through a rectifier bridge to the output of the group receiver. The receivers of

Card 1/2

UDC: 621.398.654.94

L 24543-66

ACC NR: AP6006326

the number of object selectors contain two output transformers with rectifier bridges. One output of the primary winding of both transformers is connected to the collector of the output triode of the object number selector. The other output of the primary winding of both transformers is connected to the output of the rectifier bridges. The remote signal system pulse shapers are connected to the output of the time-shaping circuit.

SUB CODE: 09/ SUBM DATE: 26Dec63

Card 2/2 *njy S*

STRATTFER, H., Inz , promovany ekonom, laureat statni ceny

Competition for the best factory branch. Tech praca 14 no.4:276-279 Ap '62.

1. Prvni tajemnik Kammer der Technik.

ANDRZEJEWSKI, J.; DONZAL,T.; FUCHS, H.; LACHISKI, S.; NIAZGUDA, T.; SWIATLIK, M.; SILKA, S.; STRANSKI, A.; ZELUDZIEWICZ, J.; TERAJEWICZ, A.

Amputations in hospitals of the Olszytn Region during the decade of 1950-1059. Chir. narz. ruchu ortop. polska 26 no.6:797-799 '61.

1. Z Oddzialow Chirurgicznych Szpitali w Olsztynie oraz Szpitali Powiatowych w Gizycku, Ketrzynie Nowym Miescie, Ostrodzie, Szczytnie.
(AMPUTAION statist)

STRANAK Antonin, Ing.   . BIALEK Zemdelske, Ing.

Effect of the tillage with rotary and subsoil plows on the dynamics
of soils physical properties and soil water conditions. Zemedel tech
I0 no.12:703-710 D '64.

1. Research Station of Basic Agrotechny and Fertilizing, Ichorelice
near Brno. Head of the Station. (Inz. CSc.) Antonin Stranak. Submitted
September 7, 1964.

AMER

Effect of the tillage with rotary and subsoil plows on the release of soil main nutrients. Zemedel tech 10 no.12:751-760 D '64.

1. Research Station of Basic Agriculture and Fertilizing, Scherelice near Brno. Head of the Station: (Inz. Agr.) Antonin Stranek. Submitted September 3, 1964.

I

CZECHOSLOVAKIA/Radio Physics - Radiation of Radio Waves.
                    Transmission Lines and Antennae

Abs Jour   :   Ref Zhur Fizika, No 12, 1959, 28103

Author   :   Stranak, Frantisek
Inst   :   -
Title   :   Damping Produced by a Round Coupling Slit in a Rec-
                 tangular Wave Guide in a TE_{10} Mode

Orig Pub   :   Slaboprondy obzor, 1958, 19, No 11, 746-749

Abstract   :   The author solves the problem of the passage of a H_{10}
                 wave through a round hole in the walls of a rectangu-
                 lar wave guide, and also through holes in diaphragms
                 placed in the transverse cross section of a wave guide
                 and in T branches in the E and H planes. Diagrams
                 are given for the determination of the attenuation
                 produced by the holes. A procedure is described for
                 measuring the coupling between the holes and experi-
                 mental results are given, which are in sufficient
                                 agreement with the computed data.

Card 1/1

STANAY Frantisek, Inz.

Use of ferrites in microwave techniques. Sdel tech 9 no.9:338-340
S '61.

STRANAK, Frantisek, inz.

A note on the reflection coefficient of an n-staged transformer in
a radio-frequency transmission line. Slaboproudy obzor 22 no.4:
239-241 Ap '61.   (EEAI 10:6)

1. Vyzkumny ustav spoju, Praha.
        (Electric transformers)   (Electric lines)   (Radio)

2c076
Z/039/61/022/006/003/005
D 225/D305

7.1712

AUTHOR: Straňák, František, Engineer

TITLE: Plane reflecting surfaces in beyond-horizon radio
            relay links

PERIODICAL: Slaboproudový obzor, v. 22, no. 6, 1961, 350-355

TEXT: The article deals with the problem of passive reflect-
ing surfaces for beyond-horizon radio-relay links, a subject which
was not yet systematically treated in Czechoslovak technical lite-
rature. The author derives in detail the expressions for important
parameters of a beyond-horizon link as shown in Fig. 1, and lists
a practical example of a reflecting surface, destined for an as-
sumed beyond-horizon relay link as shown in Fig. 11. The transmis-
sion equation for free space, under the supposition of an incident
plane wave, reads $N_p = N_v \dfrac{A_v A_{rp}}{\lambda^2 r^2}$, in which N_p is the power

available at the receiver; N_v is the power of the transmitting

Card 1/12

Plane reflecting surfaces in beyond-horizon radio relay links

antenna; r is the distance between the receiving and transmitting antenna; A_p is the functional surface of the receiving antenna; A_v is the functional surface of the transmitting antenna; and λ is the wavelength. Applied to the available power N_p and the transmitted power N_v of a reflecting surface, the transmission equation reads:

$$N_p = N_v \frac{A_v A_{rp} A_{rv} A_p}{d_1^2 d_2^2 \lambda^4},$$ in which A_{rp} is the functional receiving

surface of the reflector; A_{rv} is the functional transmitting surface of the reflector; d_1 is the distance from the transmitter antenna to the reflector; d_2 is the distance from the reflector to the receiving antenna. The available power in a link with a reflector can be derived from Fig. 4. Since the angle of incidence equals

Card 2/12

S/039/61/022/006/003/005
D225/D305

Plane reflecting surfaces in beyond-horizon radio relay links

the angle of reflection $A_{rp} = A_{rv} = A$, the equation reads:

$$N_p = N_v \frac{A_v A^2 A_p}{d_1^2 d_2^2 \lambda^4}$$. Where more reflectors with projections A_1 ,

$A_2 \ldots A_n$ are used in one link, the equation reads:

$$N_p = N_v \frac{A_v A_1^2 A_2^2 \ldots A_n^2 A_p}{d_1^2 d_2^2 \ldots d_i^2 \ldots d_{n+1}^2 \lambda^{2n+2}}$$, in which d_1 is

the distance from the transmitting antenna to the first reflector; d_{n+1} is the distance from the last reflector to the receiving antenna; and d_i is the distance between two neighbouring reflectors. The additional attenuation of beyond-horizon links can be calculated from the free-space attenuation of a direct link (α_0) and that

Card 3/12

22078

Z/039/61/022/006/003/005
D225/D305

Plane reflecting surfaces in beyond-horizon radio relay links
of a reflector link (α) and is $\Delta\alpha = \alpha - \alpha_0$; $\Delta\alpha = 20 \log \dfrac{d_1 d_2 \lambda}{(d + d)\lambda}$

/dB/. This additional attenuation decreases with decreasing wave-
lengths and increasing reflector projection surfaces on the face
of the incident wave. Instead of the additional attenuation, some-
times the reflector efficiency is derived as the ratio of the power,
N_{p2}, available at the receiver of a beyond-horizon link and the
power, N_{p1}, which would be available at the receiver in case of a
direct link and is $\approx \dfrac{N_{p2}}{N_{p1}}$, which, after substitution, calculation
according to the cosine law, and neglecting the term $d_1/d_2 + 2 \cos$
2 ζ (since d_1/d_2 is much larger than 1), receives its final form
$\eta = \dfrac{A^2}{d^2 \lambda^2} \left(\dfrac{d_2}{d_1}\right)^2$. The transmission equation was derived under the

Card 4/12

Plane reflecting surfaces in beyond-horizon radio relay links

assumption that a plane wave strikes the receiving antenna; the entire aperture of the receiving antenna is irradiated in phase. Conditions under which the transmission equation remains still valid, can be derived from Fig. 6, in which a_1 and a_2 are the maximum dimensions of transmitting and receiving antenna apertures; and d is the distance between the two parallel orientated apertures. It can be assumed that the aperture of the transmitting antenna consists of elementary radiators, two of which (1 and 2) are indicated in the figure. The maximum path difference between arbitrary spots on the aperture of the transmitting and the aperture of the receiving antenna is $\Delta = 13 - 24$.

$$\Delta = \sqrt{d^2 + \left(\frac{a_1}{2} + \frac{a_2}{2}\right)^2} - d,$$

which, solved for d, reads:

$$d = \frac{(a_1 + a_2)^2}{8\Delta} - \frac{\Delta}{2} .$$

For values of d, which are greater than that of the last equation,

Card 5/12

22078

Z/039/61/022/006/003/005
D225/D305

Plane reflecting surfaces in beyond-horizon radio relay links

the transmission equation remains valid. From the calculation for a rectangular antenna for which $d_\square \geq 16 \frac{\alpha^2}{\lambda}$ it results that under optimum conditions only the 265th part of the transmitted power can be received, or that the level of received power is at least 24.08 dB under the transmission level. An important factor is the planeness of the reflector surface, which must have a perfection to a degree that the phase difference on the face of the reflected wave does not exceed $90°$. All the above calculations assume that the centers of the transmitting antenna, the reflector, and the receiving antenna lie in the plane of incidence and that the planes of transmitting and receiving antennae apertures and the plane of the reflection surface are perpendicular to the plane of incidence. However, in the field, the transmitter, the reflector, and the receiver will be installed at different elevations and the reflecting surface must be properly orientated, either according to precise calculations, or data taken from a map. The radiation

Card 6/12

Z/039/61/022/006/003/005
D225/D305

Plane reflecting surfaces in beyond-horizon radio relay links

pattern of a rectangular reflecting surface can be derived from
Fig.9, and is formulated in detail by B. Kvasil /Ref 1: Theoretické
základy techniky centimetrových vln (Theoretical Basis for Centi-
meter-Wave Technique), Prague, SNTL, 1957, 255-278_7 This article
contains the derivation procedure and further determines the zero
directions of the radiation diagram together with the width of
the main lobe between the first zeros of the diagram in the inci-
dence plane. The last part of the paper lists the practical example
of a reflector for beyond-horizon transmission (Fig 11.). From the
two possibilities of installing the reflector at 300 or 400 m, the
higher elevation was chosen because of smaller additional attenua-
tion, simpler geometrical design and smaller angle of incidence
(smaller beam deflection). This sample link with arbitrarily
chosen topographical features is designed for a wavelength of 5 cm
and operates dependably with a total attenuation of 70dB. Both
the transmitting and receiving antenna are parabolic and have 40
dB more gain than an isotropic radiator. The antenna gain can be

Card 7/1 2

22078

Z/039/61/022/006/003/005
D225/D305

Plane reflecting surfaces in beyond-horizon radio relay links

formulated
$$G = \frac{4\pi}{\lambda^2} \eta A_g,$$
in which A_g is the geometrical surface

and η is the efficiency; $A_g \cdot \eta = A$ the effective surface. A para-
bolic antenna with horn-type primary radiator has an efficiency of
$\eta = 0.55$, an effective surface of $A = 1.99$ m^2, and a geometrical
surface of $A_g = 3.62$ m^2 (the diameter of the antenna aperture is
1.07 m). Other data of the sample link are : free-space attenuation
between the transmitter and receiver = 54 dB; additional attenua-
tion of the reflector = 16 dB; sides of rectangular reflector a =
5.05 m, b = 6.3 m; area of mirror projection A = 25 4 m^2 ; beam
width between half-power points in the plane of incidence is
$\delta(\frac{1}{2}) = 0.6^{\circ}$; angle of incidence $\varphi = 37^{\circ}47'$, the orientation
of the reflector is rather critical, its azimuth $\Phi = 37^{\circ}46'$, its
elevation $\beta = 2^{\circ}2'24''$; the minimum permissible distance between the
reflector and the receiver is d = 3.4 km. In the given case,

Card 8/12

22078
Z/039/61/022/006/003/005
D225/D305

Plane reflecting surfaces in beyond-horizon radio relay links

conditions for applying the free-space transmission equation are fulfilled. The inclination versus the horizontal plane is $\lambda = 21'30''$ for the axis of the transmitting antenna, and $\beta = 2°52'$ for the axis of the receiving antenna. The maximum planeness factor of the mirror is 4.9 mm. In conclusion, the author states that the practical design of such a reflector is rather complicated and requires great precision. The large surface of 31.8 m² must be precisely orientated, especially in view of the small beam-width of the main lobe, which is only 0.6° . The surface must also be secured against vibrations so that the maximum deflection of the reflector from the plane does not exceed 1/10 of the wavelength. Despite the large gains of the transmitter and receiving antenna, the reflector must be rather large which limits the use of passive reflectors to rather short beyond-horizon links. There are 11 figures, 1 Soviet-bloc and 8 non-Soviet-bloc references. The references to the English-language publications read as follows: H.T. Pris: Note on a Simple Transmission Formula. Proc. I.R.E. 34 61946, May, 254-256; H. Magnuski, T.F. Koch: Passive Repeater Bends

Card 9/12

22078

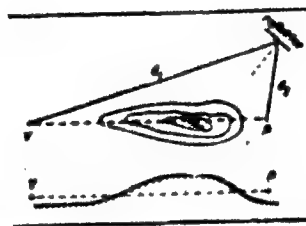Z/039/61/022/006/003/005
D225/D305

Plane reflecting surfaces in beyond-horizon radio relay links

Microwave Beam. Electronics, Feb. 1953, 134-137; W.C. Jakes: A
Theoretical Study of an Antenna-Reflector Problem, Proc. I.R.E. 41,
Feb. 1953, 272-274; R.G. Medhurst: Passive Microwave Mirrors.
Electronic and Radio Engineer 36, 1959, Dec. no 12, 442-449.

ASSOCIATION: Výzkumný ústav spojů, Praha (Communications Research
Institute, Prague).

SUBMITTED: April 20, 1960

Fig.1: Use of a reflector on a beyond-
horizon link(V=transmitter, P=
receiver).

Card 10/12

Periscopic antenna

2/039/61/022/011/006/006
0291/0304

approximated by a Gaussian function. The calculation based on the
second assumption is less accurate, but much simpler (it eliminates
double integration) and the gain can be expressed in closed form by
functions listed in tables. The error is insignificant for practical
use since it does not exceed the value of 1 dB. The author then calcu-
lates the simplified radiation pattern of a periscopic antenna, based
on the amplitude and phase distribution on the reflector projection as
resulting from the approximation of the main radiation lobe of the prim-
ary antenna. In conclusion, the author states that periscopic antennas
are very essential for microwave radio-relay links and have even a gain
vs. parabolic antennas when properly designed. However, reflectors
mounted on relay towers impose also some difficulties such as reflection
by the tower, tower rigidity, etc. There are 5 figures and 10 references:
6 Soviet-bloc and 4 non-Soviet-bloc. The references to the English-
language publications read as follows: W.C. Jakes: A Theoretical Study
of an Antenna-Reflector Problem. Proc. IRE, 1953, no. 2, pp 272-274;
R.G. Medhurst: Passive Microwave Mirrors. Electronics and Radio

Card 2/3

Z/039/61/022/012/006/009
D291/D304

9 9300

AUTHOR: Straňák, František, Engineer

TITLE: Nomograms for the design of plane reflecting surface for beyond-horizon radio-relay links

PERIODICAL: Slaboproudý obzor, v. 22, no. 12, 1961, 740-742

TEXT: By the use of nomograms the author presents the relations required for designing reflectors of beyond horizon relay links. Listed are nomograms for free space attenuation between two isotropic radiators, for additional attenuation of a single and of two reflectors, and for determining the critical distance between two apertures, in cases where the transfer equation for free space can still be considered valid. The short presentation is a supplement to an article previously written by this author, listed under Ref. 1: (F. Straňák: Rovinné odrazné plochy ve směrových spojích na trasách bez přímé viditelnosti (Plane Reflecting Surfaces in Beyond Horizon Radio-Relay Links), Slaboproudý obzor, v. 22, (1961), no. 6, pp. 350-355). There are 7 figures and 1 Soviet-bloc reference.

Card 1, 2

Nomograms for the design ...

Z/039/61/022/012/006/009
D291/D304

ASSOCIATION: Výzkumný ústav spojů, Praha (Communications Research
                Institute, Prague)

SUBMITTED: June 13, 1961

𝓑

Card 2/2

STRANAK, Frantisek, inz.

A passive relay of imperfect realization. Slaboproudy obzor
23 no.6:345-349 Je '62.

1. Vyzkumny ustav spoju, Praha.

STRANAK, Inz.

Reflecting surface as a part of antenna directional system.
Slaboproudy obzor 23 no.7:413-421 Jl '62.

Z/039/62/023/012/002/004
E192/E382

AUTHOR: Stranak, Frantisek, Engineer

TITLE: Microwave bandpass filters with quarter-wave couplings

PERIODICAL: Slaboproudy obzor, v. 23, no. 12, 1962, 680 - 685

The filter considered is illustrated in Fig. 1. The device consists of n cavities in a rectangular waveguide, each cavity being formed from a section of the guide having a length ℓ_i and two similar susceptances at the ends of each section. The normalized susceptance is jB_i and the length ℓ_i of the i-th cavity is chosen so that for a given jB_i the cavity resonates at the centre frequency f_o of the filter. All the cavities are tuned to f_o but their effective quality factors q_i are different. The length ℓ_i is approximately equal to half the wavelength in the waveguide λ_{go} corresponding to f_o. The length d_i of the coupling sections is approximately equal to $\lambda_{go}/4$. The equivalent

Card 1/3

Microwave b...ri...   ?/059/62/023/012/002/004
                          ?192/?362

circuit of such a filter is illustrated in Fig. 4, where the
series and parallel resonant circuits are tuned to the centre
frequency f_0. The filter is terminated with a matched load and
supplied from a generator with a matched output impedance. The
problem of designing the filter (either for maximum flatness or
Chebyshev response) consists of determining the effective quality
factors q_{ei} of the individual stages. The formulae for q_{ei}
are derived under the assumption that the susceptances at the
terminals of each cavity are linear functions of frequency in the
vicinity of f_0. q_{ei} are expressed as functions of the suscept-
ance at the resonant frequency. The relationship between this
susceptance and the resonance length l_i of the cavity is then
derived and a formula for d_i is determined. The problem of
realization of the susceptance is not considered.
There are 9 figures.

Card 2/3

STRANAK, Ina.

Microwave circuits for combining and branching high-frequency channels in radio relay systems. Slaboproudy obzor 24 no.2: 109-111 F '63.

STRANAK, Frantisek, Inz. CSc.

       Future of microwave communications. Slaboproudy obzor
25 no. 2: 104-105 F '64.

SIMEK, Frantisek, Inz. Dsc.

Reflecting surfaces in microwave relay telecommunications.
Ca spojo 9 no.4:7-11 Ag '64.

.. Research Institute of Telecommunications.

STRANAK, Frantisek, inz. CSc.

Microvave system engineering using large passive reflectors.
Slaboproudy obzor 25 no.10:613-616 O '64.

L 1022-66   T/FCS(k)   ER

ACCESSION NR: AP5025946

32
30
P

AUTHOR: Stranak, Fr. (Engineer, Candidate of sciences)

TITLE: Periscope antenna with phase equalization

SOURCE: Slaboproudy obzor, v. 26, no. 5, 1965, 279-285

TOPIC TAGS: antenna, antenna engineering

ABSTRACT: [Author's Russian and English summaries, modified]:
The article points out the possibility of using a periscope an-
tenna system with a reflecting plane, at the projection or aper-
ture of which phase equalization is achieved by means of a lens.
By equalizing the phase of the electromagnetic wave on the pro-
jection-aperture an effect is obtained similar to that produced
by curving the reflecting surface into the form of a paraboloid
generated by rotation, that is, increasing the gain of the entire
system. The qualities of the periscope antenna system with phase
equalization by means of a lens are analyzed. Orig. art. has: 7 figures,
31 formulas, and 4 graphs.

Card 1/2

L 1022-66

ACCESSION NR: AP5025946

2

ASSOCIATION: Vyzkumny ustav spoju, Prague (Communications Research Institute) 4/

SUBMITTED: 22Oct64   ENCL: 00   SUB CODE: EC

NR REF SOV: 001   OTHER: 008   JPRS

Card 2/2

STIGNAK, J.; CERNATA, J.

"National Competition of Czechoslovak Firemen", P. 582, (SVET MOTORU, Vol. 8, No. 19, Sept. 1954, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3, No. 12, Dec. 1954, Uncl.

STRAHAK, Josef

Use of models from wax and air mixture for precise casting.
Slevarenstvi 10 no.5:185-186 My '62.

1. Zavody Rijnove revoluce, Ubersky Brod.

BOZDECH, Z.; STRANAK,V.; VLACH,O.

Transposition of the ulnar nerve after traumatic neuritis.
Acta chir. orthop.traum. cech. 30 no.5:421-426   0'63.

1. Ortopedicka klirika lekarske fakulty UJEvP v Brne, pred-
nosta prof.d . M.Janecek.

STRANAY, V.; VLACH, O.

Contribution to the differential diagnosis of cervicobrachial syndrome.
Acta chir. orthop. traum. cech.   31 no.2:130-141 Ap '64.

1. Ortopedicka klinika lekarske fakulty UJEvP v Brne (prednosta
prof. dr. M. Janecek).

SLONIM, Dimitrij; STRANAKOVA, Vera

Laboratory infection of man with a virus of Newcastle disease.
Cas.lek.cesk. 91 no.9:264-265 29 Feb 52.

1. Ustav pro lekarskou mikrobiologii a immunologii Karlovy uni-
versity v Praze. Prednosta prof. dr. F.Patocka.
        (NEWCASTLE DISEASE, transmission,
            laboratory infect. in man)

BURIAN, V., Dr; STRANAKOVA, V., Dr; VYSOKA, B., Dr (technicka spoluprace
    N.Vedralove)

Epidemiology of diseases caused by E. coli O 111 and O 55. Cesk.
hyg. epidem. mikrob. 2 no.5:381-385 Oct. 53.

1. KHES Liberec (for Burian, Stranankova)   2. UEM-hyg. epid. fakulta
(for Vysoka)
        (ESCHERICHIA COLI,
            virulence tests)

BUDA, J., doc. inz. CSc.; SHABAIK, Z., UZ.

Machining with ceramic plates made in Czechoslovakia.
Strojirenstvi 14 no. 3: 184-194 Mr '64.

1. Department of Machining Technology, Faculty of
Mechanical Engineering, Higher School of Technology,
Kosice.

OL.. aKO, .., ...yslaw, ..of. a,r int.: ...., YOT:HA. iynsty.
m.. inr.; .NYK, Marian, ...:N.., ..., ..r

Smelting brown coal by the ion exchange method. Glow Inst gorn.
prace no.333.1-28 '64.

1. Central Mining Institute, Katowice.

... ... VV, ...

... ... director, ... and ... ... from ... 16 ... ...
... 2 ... .

... State Canning Combinate "1 May", ...

The problem of effective mechanization; a study of the building trade in Western Germany.

P. 3'. (MECHANISACE.) (Praha, Czechoslovakia) Vol. 5, No. 1, Jan. 1.5

SO: Montniy Index of East European A cession (EEAI) LC. Vol. 7, No. 5, 195"

STRANECKY, Frantisek, dr.

    "Tensile stressed constructions" by [inz., dr., arch.] Frei Otto,
[doc] Rudolf Trostel. Reviewed by Frantisek Stranecky. Poz
stavby 11 no.3:167-168 '63.

..., Frantisek, dr.

Repair of a concrete dam by plastic materials. Inz stavby 11 no.
4:148 Ap '63.

ACC NR: AT6025161   SOURCE CODE: HU/2502/65/045/004/0313/0322

AUTHOR: Foldesi, Istvan; Stranor, Gyorgy

ORG: Institute of General and Inorganic Chemistry, L. Eotvos University, Budapest; Research Institute for Electrical Industry, Budapest

TITLE: Organotin compounds, II. Preparation of organotin oxinates and testing of their fungicidal activity

SOURCE: Academia scientiarum hungaricae. Acta chimica, v. 45, no. 4, 1965, 313-322

TOPIC TAGS: organotin compound, fungicide

ABSTRACT:

ABSTRACT: Some new triorgano-tin oxinates, diorgano-tin oxinates and monoorgano-tin oxinates have been prepared by two methods: (a) from sodium oxinate and the corresponding organotin halide, and (b) from 8-hydroxyquinoline and the corresponding organotin oxide. Systematic tests for the fungicidal activity of the product have been carried out in Czapek-Dox culture medium. Triorgano-tin oxinate and the organotin trioxinate are highly effective fungicides, while diorgano-tin dioxinates have hardly any activity. Orig. art. has: 6 tables. [Orig. art. in Engl.] [JPRS: 33,906]

SUB CODE: 07, 06 / SUBM DATE: 16Jul64 / ORIG REF: 001 / OTH REF: 026

LS

Card 1/1

KOLM-YEEV, I.R.; GE NYA, N.I. [de nia, M.R.]; STRANG VSKAYA, N.V. [Stranhovs'ka, M.V.]; SHETNEMAN, A.K.

Effect of quaternary salts of 4(n-dialkylaminophenyl)-pyridines on dysentery bacteriophage. Mikrobiol. zhur. 27 no.2:56-60 '65.

(MIRA 18:5)

1. Donetskiy meditsinskiy institut.

STRAJIK, I.

no academic degree or affiliation indicated

Bratislava, Farmaceuticky Obzor, No 11-12, 1962, pp 507-508

"Experiences with Boiling Pans in the Preparation of Infusion Solutions"

SEKERA, Ales: STRANIK, Jan

Glucochloraloses. II. Electrophotometric determination of alpha-
and beta glucochloralose. Cesk. farm. 4 no.7:330-333 Sept 55.

1. Z Ustavu pro chemii farmaceutickou Masarykovy university v
Brne.
        (HYPONOTICS AND SEDATIVES, determination,
          α- & β-glucochloralose, electrophoresis)
        (ELECTROPHORESIS,
          of α- & β-glucochloralose)

Date:

Name and Person:

Affiliation:

Source:

Data:

HOUSA, Vaclav, promovany geolog; SCHEIBNER, Ervin, promovany geolog;
        STRANIK, Zdenek, promovany geolog.

        Tithonian stratigraphy of West Carpathians. Geol. sbor. 14
        no.1:3-17 '63.

        1. Geological Institute, Czechoslovak Academy of Sciences,
        Praha 2, Spalena 49 (for Housa). 2. Department of Geology
        of the Faculty of Natural Sciences, J.A.Comenius University,
        Bratislava, Gottwaldovo namesti 2 (for Schreiber). 3. Central
        Geological Institute, Prague 1, Hradebni 9 (for Stranik).

STRANJAKOVIC, Dragoslav

Disease of Ilija Garasanin. Srpski arh. celok. lek. 84 no.5:
683-690 May 56.

(BIOGRAPHIES,
Garasanin, Ilija (Ser))

STRANKMULLER, J

Czechoslovakia /Chemical Technology. Chemical Products I-14
and Their Application

Water treatment. Sewage water.

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 31779

Author : Strankmuller J.

Title : Work of the Committee on Phenolic Water in the
German Democratic Republic.

Orig Pub: Vodni hospodarstvi, 1955, 5, No 7-7a, priloha,
9-11

Abstract: The most convenient and economic method for the
purification of phenolic sewage water has been
found to be extraction with phenolsolvan. The
number of steps must be strictly limited. Adsorp-
tion with Wofatit involves large losses of methanol.
Systems have been proposed for the purification of

Card 1/2

ACC NR: AP6023122   SOURCE CODE: CZ/0060/65/000/006/0259/0260

AUTHOR: Stranska, Eva (Graduate biologist)

ORG: Parasitological Department, Section of Hygiene and Epidemiology, Ceske Budejovice (Parazitologicke oddeleni hygienicko-opidemiologickeho oddilu)

TITLE: Some findings in parasitological problems in a special group

SOURCE: Vojenske zdravotnicke listy, no. 6, 1965, 259-260

TOPIC TAGS: parasitology, disease incidence

ABSTRACT: The author examined a group of 256 illiterates and a control group of 532 normal soldiers. 58.2% of the illiterates suffered from parasites (46% had Trichuris trichuria); among the control group 9.4% showed positive findings (5.8% Lamblia intestinalis). In 1963 the author investigated 122 military cooks; in 15 of them positive findings were made (11 Entamoeba coli). Orig. art. has: 3 tables. [JPRS]

SUB CODE: 06 / SUBM DATE: none

Card 1/1   UDC: 616-002.9-058(379.2):356.33

BILY, Jiri; STRANSKA, Tat'ana

Dermoloxy as technic of determination of higher nervous activity.
Cesk. psychiat. 53 no.5:348-352 Oct 57.

1. Psychiatricka klinika VIA v Hradci Kralove.
        (CENTRAL NERVOUS SYSTEM, physiol.
                determ. of funct. with dermolexy (Cz))
        (SENSATION
                dermolexy in determ. of funct. of CNS (Cz))

UTRATA, Roman; STRANSKA, Tat'ana

Movement dynamics & stereotypes in various psychic diseases. Cesk.
psychiat. 53 no.5:359-364 Oct 57.

1. Z Psychiatrickeho oddeleni UVN a psychiatricke kliniky VLA v
Hradci Kralove.
          (MENTAL DISORDERS, physiol.
                movement dynamics (Cz))
          (MOVEMENT, in var. dis.
                dynamics in ment. disord. (Cz))

STRANSKA, T.; PELIKAN, V.

Rehabilitation in aphasia. Cesk. psychiat. 57 no.6:383-388 '61.

1. Psychiatricka klinika lekarske fakulty KU v Hradci Kralove.
            (APHASIA rehabil.)